



GLOBAL WARMING AND ITS EFFECTS

Marianne Magana

Research Scholars Program, Harvard Student Agencies, In collaboration with Learn with Leaders

ABSTRACT

This research examines the causes and effects of climate change, emphasizing the role of human activities such as fossil fuel consumption, deforestation, and industrial pollution. It explores the severe consequences of environmental degradation, including global warming, biodiversity loss, and the proliferation of diseases. By synthesizing findings from credible sources, the study highlights the disproportionate impact of pollution on vulnerable populations, such as those in developing countries like Honduras, where air pollution and inadequate infrastructure exacerbate health risks. The research underscores the urgency of mitigating climate change through collective action, including reducing carbon emissions, reforestation, and promoting sustainable practices. It also addresses the role of education and individual responsibility in fostering environmental awareness and inspiring change. Despite the global challenges posed by climate change, the study argues that human innovation and collaboration can lead to effective solutions, ensuring a healthier and more sustainable future for all. By identifying actionable strategies and emphasizing the importance of empathy and interdependence, this paper aims to contribute to the growing discourse on environmental protection and climate resilience.

KEYWORDS: Climate Change, Global Warming, Pollution, Environmental Protection, Sustainable Practices, Greenhouse Effect

INTRODUCTION

Human activities significantly impact the environment, often in ways that go unnoticed in daily life. It is crucial to acknowledge that the actions individuals undertake can influence the planet on both local and global scales. Environmental care is not merely a choice but a necessity to avoid severe consequences in the future. Neglecting environmental responsibilities could result in global issues such as climate change, closely linked to the proliferation of various diseases. A deteriorating environment compromises the health and well-being of current and future generations. Therefore, prioritizing environmental protection is essential to ensure a sustainable and healthy future for humanity.

METHODOLOGY

This study adopts a secondary qualitative methodology to explore the causes and effects of climate change and the ways humans can mitigate its impacts. The research relies on academic articles, credible reports, and expert analyses to examine global warming, pollution, and their socioeconomic consequences. This methodology allows for a detailed understanding of the topic through existing data, eliminating the need for primary data collection. An inspiring factor for this research was the author's exposure to the Environmental Social Governance (ESG) Department of the IDB, where their father works. However, a limitation of this approach is its reliance on pre-existing literature, which may not fully capture recent environmental developments.

RESULTS

According to the article by the Environmental Defense Fund

(2024), "humans are the main cause of climate change: burning fossil fuels, producing livestock, clearing trees, and increasing the amount of heat-trapping gases in the atmosphere." Many people around the world have died because of the amount of pollution present in the air, especially those living in third-world countries such as Honduras. According to The Guardian (2024), "Honduran authorities have raised the threat level to its highest in most of the country's departments because of the public health risks and advised people to close windows and stay indoors to avoid exposure to contaminated air." Honduran city's air pollution is almost 50 times higher than WHO guidelines (Pinnow, 2024). For example, in big cities with poor air quality, people are contracting respiratory and other health problems from factories and other industrial units. The Interactive Country Fiches (2024) states that "the main health problems identified in Honduran children under five years of age and in housewives are acute respiratory infections and eye problems. An important risk factor for these diseases is exposure to smoke from biomass fuels, especially firewood, inside the home." Studies have shown that breathing in dirty air reduces life expectancy; thus, drastic and firm measures must be taken to protect our environment and health.

The release of greenhouse gases into the atmosphere is "the process through which heat is trapped near Earth's surface by substances known as greenhouse gases" (NASA, 2024). This causes heat to be stuck in the atmosphere. This causes the temperatures on the planet to rise, which not only affects the planet but also everything that lives on it. The increase in temperature is causing an increase in natural disasters like floods, tornadoes, hurricanes, and many more. Since the temperature is

rising, agriculture is becoming more difficult, and deforestation is rampant leading to an increase in CO₂ in the atmosphere. According to the European Commission (2024), “2011-2020 was the warmest decade recorded, and human-induced global warming is presently increasing at a rate of 0.2°C per decade.” This also has an impact on animals and the habitats they live in because of how the temperature affects the planet. For example, polar bears are at risk of extinction due to the melting polar caps. This is only one example of the biodiversity around the world that is affected by the rising temperatures.

According to the World Bank (2024), “Pollution stunts economic growth, exacerbates poverty and inequality in both urban and rural areas, and significantly contributes to climate change. Poor people, who cannot afford to protect themselves from the negative impacts of pollution, end up suffering the most.” The article also states that pollution causes more than 9 million premature deaths, the majority of them due to air pollution. According to The Washington Post (2023), “Since the beginning of the industrial era, mainly due to human activities like burning fossil fuels that emit heat-trapping gases into the atmosphere. Researchers have called to reduce fossil fuel consumption and limit Earth’s future warming to ideally 1.5 degrees Celsius, stating that further warming will make climate disasters significantly more extreme and impossible to adapt to.”

DISCUSSION

Some ways in which the general population can contribute to the environment are by reducing water wastage, recycling, preventing littering, reducing the burning of fossil fuels, reducing waste dumping in the ocean, reforestation, and reusing—or avoiding—plastic materials, among others. These are some ways in which we could contribute to the environment and avoid damaging the planet on which we all live. If adequate action is not taken now, there will be more species in danger of extinction, and diseases that will make it more difficult for scientists and doctors to find a cure because, with more contamination, more harmful microorganisms will arise. These environmental problems will continue to affect the planet as long as people are not aware that their actions cause pollution. This is a major problem that can negatively affect everybody around them. Many people do not change their mindsets because they think that a single person’s actions are inconsequential, but it is important to realize that every effort counts in protecting the planet. People who act without considering the consequences know that this may not affect their lives, but their actions will affect the next generation.

CONCLUSION

The planet faces numerous challenges, many of which stem from human activities. However, humans are uniquely positioned to propose and implement solutions that can lead to a healthier and more sustainable future. A critical part of this responsibility involves fostering empathy for those most affected by climate change, such as individuals displaced or impacted by natural disasters caused by environmental degradation. Small actions, like picking up litter, can collectively make a significant difference in combating global warming and its consequences.

Raising awareness about the urgency of environmental protection is vital to ensuring that everyone understands the importance of preserving the planet. By working together and promoting eco-friendly practices, society can develop innovative solutions to protect the Earth, safeguard public health, and create a sustainable future for generations to come.

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